	ים בי ביים אורים ויים בי בי בי	APPROXES FOR SELECTION OF SELECTION OF				⊇hi.	n f	pdo	D-1-1	NOC	We.	
Work Orde	er ID 94	195 M		*941					J	P	Page 1	
tem ID: Revision ID: tem Name: Start Date: Required Date: Reference:	D2199-1 Strut Details 11/30/12 12/21/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*	Accept	*N900 Cust Item I Customer:		೧ ೧*	Setup	Start Stop	*NS	S1* S2*	- -
Approvals:		n: 州しゴ				ate:		Run	Start Stop	iVi	₹1* ₹2*	
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool# I	Plan Acc			Reject Number	Insp.	
Draw Nbr	Rev	ision Nbr								-		13/01/0
D2199	Rev	E1									<i>O</i> 7	- (D) (O) (C)
*100 *100* Brake NC Brake NC		NC BRAKE Memo Punch per I	Dwg. D2199 and Spec Co	0.00 0.00 ntrol Dwg D2638			-1	<i>i</i>	 ,			
110		Small Fab		0.00				í			85	slorlot
110 Small Fab		Memo Deburr		0.00								,
120 *4 2 0 *		QC5- Inspect part comp	leteness to step on W/O	0.00 S	5		1	Ţ				
120 QC Quality Control		Memo		0.00 13-1-	8							

												DQA:	Date	e: _	
NCR:	Yes	/ No				WORK ORDER NON-O	CO	VFORM	MANCE / UP	DATE				_	
											QA (Closed:	Date	e:	
Work Ord	or.					DISPOSITION				AGAINST DE	PART	MENT	PROCESS		
Work Ord	C1.					Rework	1		Skid-tube	Crosstube]		Water Jet	٦	Engineering
Part I	No.					Scrap	1		Machining	Small Fab		Pro	d. Eng. Coor.		Quality
						Use-as-is	1	Therm	noforming	Finishing	R	ec/Stor	e/Packaging		Other
NCR I	No.					Work Order Update			Large Fab	Composite]		Supplier		
				<u> </u>								-	<u> </u>	_	
Root			,			ption of work order update	1	nitial	l	tion	1	gn &		-	
Cause	,	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	D	ate	Verification	4	QC Inspector
Doc/Data	Ш														
Equip/Tooling											l				
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Material															
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Supplier			1												
Training															
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						F	AUL	T CATE	GORY						
Landi	ing (Gear				General		_		<u></u>	_		_		
		Bending				Bend		Grain			Oval	ized			Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over	r/Under	tolerance		Temperature/Cure
	Г	Cracks				Broken/Damaged	Г	Inspecti	ion Incomplete		Part	Incorre	ct [Weld
		Crushed/	Crimped.			Burrs		Instruct	tions Incomplete/	Unclear	Part	Lost/M	issing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part	Moved	_		÷
		Heat Trea	at			Countersink		Mislabe	eled		Posit	tioned V	Vrong		
		Inspectio	n Strip in	Tube		Cut Too Short		Misread	t		┥	er Loss/			Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

150

Identify as per dwg & Stock Location:

0.00

150 Packaging

SNIP Memo

0.00

Packaging

											DQA:	Date	e:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORM	MANCE / UPDATE					
	_					· · · · · · · · · · · · · · · · · · ·					QA Closed:	Date	e:	_
Work Orde	or.					DISPOSITION			AGAINS	ST DE	PARTMENT	PROCESS	•	
	-					Rework			Skid-tube Crosstub	oe 📗		Water Jet	Engineering	
Part N	No.					Scrap			Machining Small Fa	-		d. Eng. Coor.	Quality	
						Use-as-is			noforming Finishir	<u> </u>	Rec/Stor	e/Packaging	Other	-
NCR N	No.					Work Order Update			Large Fab Composit	te[l	Supplier		J
Root					Descri	ption of work order update		nitial	Action		Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector	
Doc/Data	Ш													
Equip/Tooling														
Operator											_oit.			
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Unapproved								i			<u></u>			_
					· · · · · · · · · · · · · · · · · · ·	F	AUL	T CATE	GORY					
Landi	ng G	Gear				General		_			-	-		
		Bending				Bend		Grain		L	Ovalized	1	Pressure/Forced	
,		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re	L	Over/Under	tolerance	Temperature/Cure	е
	Ш	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld	
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	issing	Wrong Stock Pulle	<u>.</u> d
		Cuffs				Contamination		Mainte	nance		Part Moved		•	
		Heat Trea	it			Countersink] Mislabe	led		Positioned V	V rong		
		Inspection	n Strip in	Tube		Cut Too Short		Misread	I		Power Loss/	'Surge	Other	
		Ripples in	Bend			Drill Holes		Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde November-30-12				*941	195*							Page 3
Item ID: Revision ID: Item Name:	D2199-1 Strut Details			Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*
Start Date: Required Date: Reference:	11/30/12 12/21/12	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item I Customer:	D:						
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		nte:		1	Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 160 *160* QC Quality Control	D	Operation Description QC21- Final Inspection Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Re Qt	•	Reject Number	Insp. Stamp

MF 13-1-11

WORK ORDER NON CON												DQA:	Date	e:	_
NCR:	⁄es	/ No					WORK ORDER NON-C	O	VFORM	MANCE / UPD	DATE	·			
		 				_						QA Closed:	Date	e:	•
Work Orde	er:						DISPOSITION		i		AGAINST DE	PARTMENT	PROCESS		١
Part I	•						Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet	Engineering Quality	
NCR I	•	·			·	١	Use-as-is Work Order Update		Thern	noforming	Finishing Composite	4	e/Packaging Supplier	Other	
IVER	۷O.						work Order Opdate[1		Large Fab	Composite	Ţ	20philei [l
Root					Descr	rip	tion of work order update		nitial	Act	ion	Sign &			1
Cause		Date	Step	Qty		or	Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector	
oc/Data								:							
quip/Tooling										•					۱
perator															
laterial etup								l							
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rocess															
upplier								1							1
raining							•								١
napproved															
							F	AUL	T CATE	GORY					
Landi	_	1			_	_	General		,		_	_	_		
		Bending			L		Bend	<u> </u>	Grain		<u> </u>	Ovalized	_	Pressure/Forced	
		Centre No	t Concer	ntric to	o/s		BOM/Route	_	Hardwa		<u> </u>	Over/Under	F	Temperature/Cure	1
		Cracks			<u> </u>	_	Broken/Damaged		i	on Incomplete		Part Incorred	F-	Weld	
		Crushed/C	Crimped_		-	-1	Burrs		4	ions Incomplete/L	Inclear	Part Lost/Mi	ssing	Wrong Stock Pulled	
		Cuffs			-	-	Contamination	_	Mainte		<u> </u> -	Part Moved			
		Heat Treat		Tubo	<u> </u>		Countersink Cut Too Short	-	Mislabe		<u> </u>	Positioned V Power Loss/		Other	
		Inspection Ripples in		rube	-	→	Drill Holes	-	Misread Offset	į		Trower ross/	ourge	Other	_
		Torque W		vtrucio	, H	—;	Drawing	-	4	Calibration					-
i	\vdash	Turning Se			'' 	_	Finish	-	4	Sequence		-		 	_
		_			 	-1			1	•					-
		Wave/Twi	ist in Tub	e			Folio		Outside	Dimensions					7

Picklist Print

November-30-12 10:08:40 AM

Work Order ID:

94195

Parent Item:

D2199-1

Parent Item Name:

Strut Details

Start Date: 11/30/12

Required Date: 12/21/12

Page 1

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP

B02.06.10Added finish NG/RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.750W.049 304 RD Tube .750 x .049W	V	Purchased	No			100	f	484.1868	1.55	3.2631578	<i>S</i> ₈	13/2	0/02
				Location		Loc Qty	<u>La</u>	c Code					
				MAT017		484.1868435							
				1093	14	9.333							
				1116	19	3							
				11218	87	4							
				11280	00	11							
				1140	51	2.75							

122468

2.75 114852 3 116108 117797 0.75 120441 0.000794 121170 234.89 121666 10.232 122312 71.51

133.72105

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	ON	NFORM	/ANCE / UP		QA Closed:	Date:	
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part I	-					Rework Scrap Use-as-is		ľ	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR I	No					Work Order Update			Large Fab	Composite		Supplier	
Root					Descri	ption of work order update	1	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data													
quip/Tooling													
Operator]										
Material			1										
Setup												*	

FAULT CATEGORY

Grain

Hardware

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Inspection Incomplete

Instructions Incomplete/Unclear

Pressure/Forced

Weld

Other

Temperature/Cure

Wrong Stock Pulled

Ovalized

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Over/Under tolerance

General

Bend

Burrs

BOM/Route

Contamination Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Broken/Damaged

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Other
Process
Supplier
Training
Unapproved

Landing Gear

Bending

Cracks

Cuffs

Heat Treat

Crushed/Crimped.

Inspection Strip in Tube

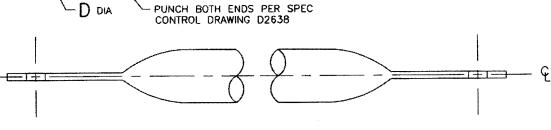
Torque Waves in Extrusion

Centre Not Concentric to O/S









	Α	В	С	D	
D2199-1	18.30	17.50	0.257	0.257	
D2199-3	5.80	5.00	0.257	0.257	
D2199-5	22.64	21.84	0.257	0.316	
D2199-7	14.74	13.94	0.257	0.257]
D2199-9	16.52	15.72	0.257	0.257	
D2199-11	23.60	22.80	0.257	0.316	B
D2199-13	15.96	15.16	0.257	0.257	8
D2199-15	17.57	16.77	0.257	0.257] (0)
D2199-17	28.05	27.25	0.257	0.316]
D2199-19	18.90	18.10	0.257	0.257]
D2199-21	10.80	10.00	0.257	0.257] (0)
D2199-23	26.18	25.38	0.257	0.316] (E)
D2199-25	19.93	19.13	0.257	0.257	
D2199-27	27.34	26.54	0.257	0.316	3 # 00.10.13
D2199-29	2-1 - 11	20.31	0.257	0.257	1) %

NOTES:

δ

DART AEROSPACE LTD

1. MAKE PER TEMPLATE DT2199-XX WHERE XX IS THE RESPECTIVE DASH NUMBER
2. MATERIAL: AISI 304/316 STAINLESS STEEL TUBE \$0.750 x 0.049 WALL
3. FINISH: POWDER COAT WHITE (4.3.5.Z) PER DART QSI \$\infty\$ 4.3/EA

98.04.28 98.04.28 1993 DRAWING NO. D2199 ADDED -23 AND ADDED TEMPLATE REDRAWN IN CAD STRUT DETAILS ADDED ADDED ADDED NEW ISSUE ADD TUNKIT -21 -17 1 = 1 AND <u>ر</u>

AND

5

NTS

5

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801

25 PER

CTRL CTRL

A565M DWG

DART AEROSPACE L

J SHEET 1 OF 1 REV. E